

# **Idaho Standards Achievement Tests Language Usage Alignment Study Summary Report**

This report of the Idaho Standards Achievement Tests (ISAT) Language Usage Alignment Study summarizes the results of the depth-of-knowledge (DOK) consensus and the four alignment criteria for the ISAT content area language usage. The study was done in Boise, Idaho, January 15–18, 2008. The four alignment criteria, including a brief description of each, are as follows:

- Categorical concurrence – a general indication of how well the test includes items that measure content from each content standard
- Depth-of-knowledge consistency – an indication of whether the cognitive demands required of the students on the test are consistent with what students are expected to know and do as stated in the content standards
- Range-of-knowledge correspondence – an indication of whether the extent of knowledge expected of students by a content standard is the same as the extent of knowledge required of students to answer the test items correctly
- Balance of representation – the degree to which one objective in a content standard is given more emphasis on the test than another objective within the same content standard. To judge the distribution of the test items, an index is used (Webb, 2002, p. 18)

## **Depth-of-Knowledge Consensus**

### **Results**

#### **Language Usage**

The eight reviewers reached consensus on the DOK levels for the language usage objectives. The objectives are the specific statements of what students should know and be able to do at a specific grade level. Some states refer to these as grade-level-expectations (GLEs). The objectives for grades 3–8 and 10 were coded Level 1, 2, or 3 depth of knowledge. The number of objectives by DOK levels for all grades is provided in Table 1.

**Table 1: Language Usage Depth-of-Knowledge Consensus**

<b>Grade</b>	<b>Number of Objectives</b>	<b>DOK Level</b>	<b>Objectives by DOK Level</b>	
			<i>Number</i>	<i>Percent</i>
3	13	1	4	30.77%
		2	7	53.85%
		3	2	15.38%
4	13	1	4	30.77%
		2	7	53.85%
		3	2	15.38%
5	14	1	4	28.57%
		2	8	57.14%
		3	2	21.43%
6	14	1	4	28.57%
		2	7	50.00%
		3	3	21.43%
7	14	1	4	28.57%
		2	8	57.14%
		3	2	14.29%
8	14	1	4	28.57%
		2	9	64.29%
		3	1	7.14%
10	12	1	1	8.33%
		2	9	75.00%
		3	2	16.67%

## Categorical Concurrence

Categorical Concurrence is the general indication of how well the test includes items that measure content from each content standard. This criterion was judged by first allowing reviewers to make a determination as to whether the test as a whole included items measuring content from each of the standards. The reviewers were told to use their professional judgment, as well as the Webb guiding principle, to determine that at least six items measuring content from each standard is a good indicator of categorical concurrence between the standard and the test (Webb, 2002, p. 6).

### Results

#### Language Usage

The categorical concurrence for grades 3–8 and 10 is “Yes”. This indicates that the average number of items coded across reviewers to the standards is at least 6.0. The reviewers determined that there are sufficient items assessing the content for both standards across grades 3–8 and 10. A summary of categorical concurrence for language usage is presented in Table 2.

**Table 2: Language Usage Categorical Concurrence**

Grades	Standard	Categorical Concurrence
3–8, and 10	1. Writing Process	Yes
	2. Writing Components	Yes

## Depth-of-Knowledge Consistency

According to Norman Webb’s model (2002, p. 7), DOK consistency between grade level objectives and test items indicates alignment if what is elicited from students on the test is as demanding cognitively as what students are expected to know and do as stated in the objectives. For consistency to exist between the test items and the objectives, each item should be coded the same DOK level as the objective or above the DOK level of the objective. According to Webb, for a measure of consistency, at least 50% of the items corresponding to an objective must be at or above the level of knowledge of the objective.

### Results

**Table 3: Language Usage—Percent of Questions at DOK Level**

Grades	Standard	Under	At	Above	Total At and Above
3	Writing Process	22.1	61.4	16.5	77.9
	Writing Components	10.8	73.6	15.6	89.2
4	Writing Process	20.5	70.4	9.1	79.5
	Writing Components	9.8	73.6	16.6	90.2
5	Writing Process	18.4	70.8	10.7	81.5
	Writing Components	6.5	73.6	19.9	93.5
6	Writing Process	27.3	62.3	10.4	72.7
	Writing Components	5.5	59.0	35.5	94.5
7	Writing Process	18.1	69.8	12.1	81.9
	Writing Components	6.5	72.5	21.1	93.6
8	Writing Process	9.5	74.3	16.2	90.5
	Writing Components	6.9	64.4	28.6	93.0
10	Writing Process	13.4	71.3	15.4	86.7
	Writing Components	27.8	56.4	15.8	72.2

## Range-of-Knowledge Correspondence

According to Webb (2002, p. 18), for the content standards and the items to be aligned, the breadth of knowledge required on both should be comparable. The range-of-knowledge criterion is used to judge whether a comparable span of knowledge expected of students by a standard is the same as, or corresponds to, the span of knowledge that students need in order to correctly answer the items. For an acceptable range of knowledge, at least 50% of the objectives within a standard should have at least one item.

### Results

The reviewers determined that all standards for language usage grades 3–8 and 10 had at least 50% of the objectives with at least one related item. Table 4 summarizes the range-of-knowledge correspondence of the standards.

**Table 4: Language Usage Range of Knowledge Correspondence**

Grades	Standard	Range of Knowledge
3–8, and 10	Writing Process	Yes
	Writing Components	Yes

## Balance of Representation

Balance of Representation is the degree to which one objective is given more emphasis on the test than another objective within the same standard (Webb, 2002, p. 18). An index is used to judge the distribution of the test items across the objectives. This index only considers the objectives for a standard that have at least one related test item.

### Results

#### Language Usage

For language usage grades 3–8 and 10, the results of the reviewers indicated that items were fairly evenly distributed among the objectives in each standard. Table 5 presents the language usage balance of representation summary.

**Table 5: Language Usage Balance of Representation**

Grades	Standard	Balance of Representation
3	Writing Process	Yes
	Writing Components	Yes
4	Writing Process	Yes
	Writing Components	Yes
5	Writing Process	Yes
	Writing Components	Yes
6	Writing Process	Yes
	Writing Components	Yes
7	Writing Process	Yes
	Writing Components	Yes
8	Writing Process	Yes
	Writing Components	Yes
10	Writing Process	Yes
	Writing Components	Yes

## Reference

Webb, N.L. (2002). *Alignment Study in Language Arts, Mathematics, Science, and Social Studies of State Standards and Assessments for Four States*. State Collaborative on Assessment & State Standards (SCASS). Technical Issues in Large-Scale Assessment (TILSA): University of Wisconsin, Wisconsin Center for Education Research.